A review of *Parablatticida* Girault (Hymenoptera: Encyrtidae) from China, with description of two new species

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Abstract: Six species of *Parablatticida* Girault are reported from China, of which two species, *P. orientalis* sp. nov. and *P. scapata* sp. nov., are described as new to science. *Parablatticida brevicornis* (Dalman), *P. magniclava* Hayat and *P. terebrata* (Trjapitzin) are recorded from China for the first time. A key to Chinese species of *Parablatticida* is provided and characters of the species are illustrated. The type specimens are deposited in the Zoological Collection of the Institute of Zoology, Chinese Academy of Sciences, Beijing, China.

Key words: Hymenoptera; Encyrtidae; Parablatticida; new species; China

Parablatticida Girault (1915) is a widely distributed genus of Encyrtidae (Hymenoptera) currently with twelve described species (Noyes, 2006). The genus may be the most diverse in the oriental region, where, with the addition of the data from this paper, nine species are now known. Parablatticida is distinguished by the following characteristics: mandibles tridentate, occipital margin sharp, all funicular segments transverse or subquadrate, mesoscutum and scutellum, or at least scutellum covered with striated reticulations which giving a silky appearance; ovipositor with 2nd valvifer apically enlarged and developed into a lamella. The separation of Parablatticida species is difficult because of their small size and similar appearance. Thus accurate identification requires good quality specimens.

In this paper, six species of *Parablatticida* Girault are reported from China, of which two species are described as new to science. *Parablatticida brevicornis* (Dalman), *P. magniclava* Hayat and *P. terebrata* (Trjapitzin) are recorded from China for the first time. A key to Chinese species (females) of Parablatticida is provided. In the description, absolute measurements are used. The terminology and morphological interpretations used in this paper, if not specified, follow that of Noyes and Hayat (1984). All specimens studied here, unless otherwise stated, are deposited in the Zoological Collection of Institute of Zoology, Chinese Academy of Sciences, Beijing, China.

Depositories: BMNH, Natural History Museum, London, UK; IZCAS, Institute of Zoology, Chinese

Academy of Sciences, Beijing, China; ZADMU, Zoological Museum, Aligarh Muslim, Uttar Pradesh, India; ZISP, Zoological Institute, St. Petersburg, Russia.

Genus Parablatticida Girault

 $\begin{tabular}{lll} \it Parablatticida & \it Girault , & 1915 : & 117 . & \it Type & species : \\ \it Parablatticida pachyscapha & \it Girault , by original designation . \\ \end{tabular}$

Holanusia Girault , 1915: 162. Type species: Holanusia convexus Girault , by original designation. Synonymy with Parablatticida by Noyes & Hayat , 1984: 314.

Symphycus Masi, 1917: 155. Type species: Symphycus aphycoides Masi, by monotypy. Synonymy with Parablatticida by Noyes & Hayat, 1984: 314.

Geniaspidius Masi, 1917: 149. Type species: Geniaspidius viduus Masi, by monotypy. Synonymy with Parablatticida by Noyes & Hayat, 1984: 314.

Amaurilyma Graham, 1958: 153. Type species: Encyrtus brevicornis Dalman, by original designation. Synonymy with Parablatticida by Noyes & Hayat, 1984: 314.

Desobius Noyes, 1980: 192. Type species: Desobius convexus Noyes, by original designation. Synonymy with Parablatticida by Noyes & Hayat, 1984: 314.

Diagnosis. Female: Body robust , rarely slender; body coloration often black or dark brown , rarely yellowish brown; frontovertex 1/4-1/3 head width , often with some shallow piliferous punctures sparsely beset in reticulations; ocelli usually forming an acute triangle; occipital margin sharp; antenna with scape varying from subcylindrical to conspicuously expanded and flattened; funicle 6-segmented and usually with all funicular segments transverse, rarely apical ones subquadrate; clava 3-segmented, apex slightly to

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strongly obliquely truncated; mandibles tridentate; maxillary palpi 4-segmented; labial palpi 3-segmented; dorsum of thorax moderately to conspicuously convex; mesoscutum and scutellum, or at least scutellum covered with striated reticulations giving a silky appearance; fore wing usually hyaline; linea calva not interrupted posteriorly; marginal vein more or less twice longer than wide; postmarginal vein usually shorter than stigmal vein, rarely subequal in length; stigmal vein well developed and longer than marginal vein; gaster about as long as thorax; ovipositor with 2nd valvifer apically enlarged and developing into a lamella (Figs. 7 and 8); ovipositor sheath hidden, slightly exserted, or distinctly exserted.

Male: Very similar to female but for antenna and genitalia.

The systematic position of *Parablatticida* is not clear. Noyes and Hayat (1984) placed it questionably in the Encyrtinae, Microteryini, and suggested that it may be related to *Exoristobia* Ashmead (1904) and *Phauloencyrtus* Girault (1940) (also see Dahms and Gordh, 1997). However, as far as we know, the ovipositor of *Parablatticida* is quite different from other genera currently placed in the Microteryini.

1. Parablatticida brevicornis (Dalman) (Figs. 1,7, 9,10,11) New Record for China

Encyrtus brevicornis Dalman , 1820 : 162. Lectotype \mathcal{S} (designated by Graham , 1958 : 153) , Sweden.

Encyrtus gabestus Walker , 1838 : 116. Lectotype $\mathcal{S}($ designated by Graham , 1958 : 155) , Ireland. Synonymy with brevicornis by Graham , 1958 : 155 .

Encyrtus brevicornis Dalman: Curtis, 1829:113.

Epiencyrtus brevicornis (Dalman): Thomson , 1854:251; Mercet , 1921:291-292; Hellén , 1949:47-48; Ferrière , 1953:20.

Microterys brevicornis (Dalman): Thomson, 1876:167.

Amaurilyma brevicornis (Dalman) : Graham , 1958 : 153 – 155 ; Trjapitzin , 1978 : 240 .

Parablatticida brevicornis (Dalman): Noyes & Hayat, 1984: 314; Trjapitzin, 1989: 384; Hayat, 2003: 199.

Diagnosis. Female: Body black (length 0.9 – 1.8 mm); antenna dark brown; legs generally dark brown, except joints, basal tarsal segments, and apical half or so of mid tibia yellowish. Head about 3 times as wide as frontovertex; ocelli forming an angle of about 60°; antenna (Fig. 1) with scape clearly expanded and flattened, 2.0 – 2.5 times as long as broad; funicle with F1 – F3 distinctly smaller than F4 – F6; clava 3-segmented, obliquely truncate; fore wing about 2.1 times as long as broad, venation as in Fig. 11; ovipositor (Fig. 7) often slightly exserted.

Male: Similar to female but for antenna (Fig. 9) and genitalia (Fig. 10).

Host: Unknown.

Distribution: China , Czechoslovakia ; Finland ; Georgia ; Germany ; Hungary ; Ireland ; Italy ;

Mongolia ; Romania ; Russia ; Spain ; Sweden ; United Kingdom ; Yugoslavia.

Material examined: CHINA, $1 \stackrel{\circ}{+}$, Fujian: Chongan , 6. v. 1982 , LIN Nai-Quan ; 1 $\stackrel{\circ}{+}$, Fujian : Wuyi Mt., vi. 1980, LIN Nai-Quan; 1 ♀, Fujian, 20. x. 1979, HUANG Ju-Chang; $1 \stackrel{\triangle}{\rightarrow}$, Hubei: Hefeng, 30. vii. 1989, 1, 200 m, HUANG Da-Wei; 2 $\stackrel{\hookrightarrow}{+}$, Hubei: Hefeng, 30. vii. 1989, 1 450 m, HUANG Da-Wei; $6 \stackrel{\circ}{+} \stackrel{\circ}{+}$, Hubei: Hefeng, 1. viii. 1989, 1 400 m, HUANG Da-Wei; $7 \stackrel{\circ}{+} \stackrel{\circ}{+}$, Hubei: Xuan 'en , 4 – 6. viii. 1989 , 1 000 m , HUANG Da-Wei; 1 ♀ , Jiangxi: Dayu, 14. viii. 1985, LI Chang-Fang; $1 \stackrel{\triangle}{+}$, Sichuan, 31.x.1983, LI Chang-Fang; 3 $\stackrel{\triangle}{+}$, Sichuan: Wulong , 6. vii. 1989 , 650 m , HUANG Da-Wei; 3 & A, Sichuan: Wulong, 6. vii. 1989, 650 m, HUANG Da-Wei; $2 \stackrel{\circ}{+} \stackrel{\circ}{+}$, Yunnan: Lijiang, 14. viii. 1984, LI Chang-Fang; 2 + +, Yunnan: Xishuangbanna, 13. xi. 2002, ZHEN Wen-Quan. RUSSIA, $1 \stackrel{\circ}{+}$, St. Petersburg, 17. viii. 1932, Nykol 'skaya (determined by Trjapitzin as Amaurilyma brevicornis).

Comments: Parablatticida brevicornis is very close to Parablatticida pachyscapa Girault (Girault, 1915) and possibly they are synonymies, which needs further study (see Noyes and Hayat, 1984).

2. Parablatticida citri (Mercet)(Figs. 5, 15)

Aphidencyrtus citri Mercet , 1921 : 347. $\stackrel{\wedge}{\to}$ \$\mathcal{J}\$, Spain , Madrid Museum (No types located according to Noyes , 1981).

Amaurilyma citri (Mercet): Trjapitzin, 1965: 901; Trjapitzin, 1978: 240.

Parablatticida citri (Mercet): Trjapitzin, 1989: 384; Hayat, 2003: 199; Xu, 2003: 19; Zhang and Huang, 2004: 86.

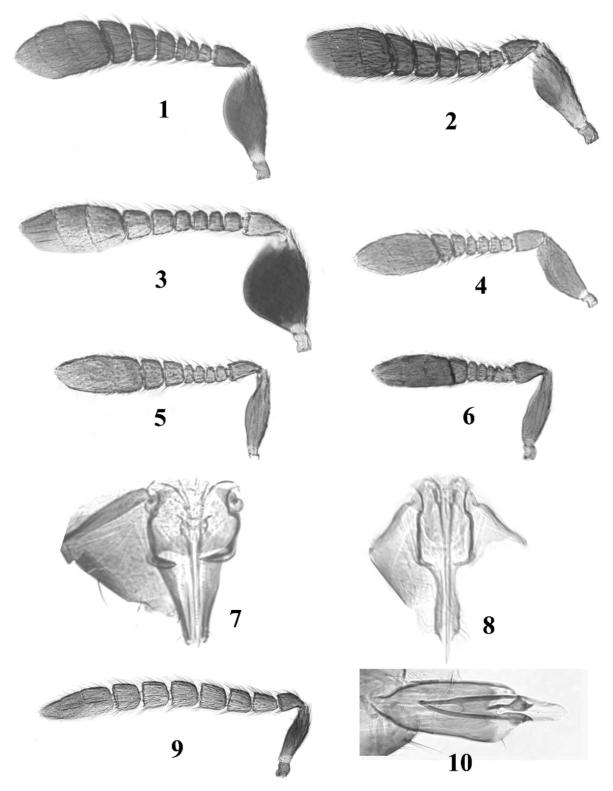
Diagnosis. Female: Body (length 0.7 - 1.2 mm); coloration similar to P. brevicornis; head often more than 3 times as wide as frontovertex; ocelli forming an angle slightly less than 60° ; antenna (Fig. 5) with scape cylindrical or slightly expanded and flattened, about 3 times as long as broad; funicle with F1 – F4 distinctly smaller than F5 – F6; clava 3-segmented, usually obliquely truncate; fore wing about 2.1 times as long as broad, venation as in Fig. 15; ovipositor hardly exserted, ovipositor sheath about 0.4 times ovipositor length.

Male: Unknown.

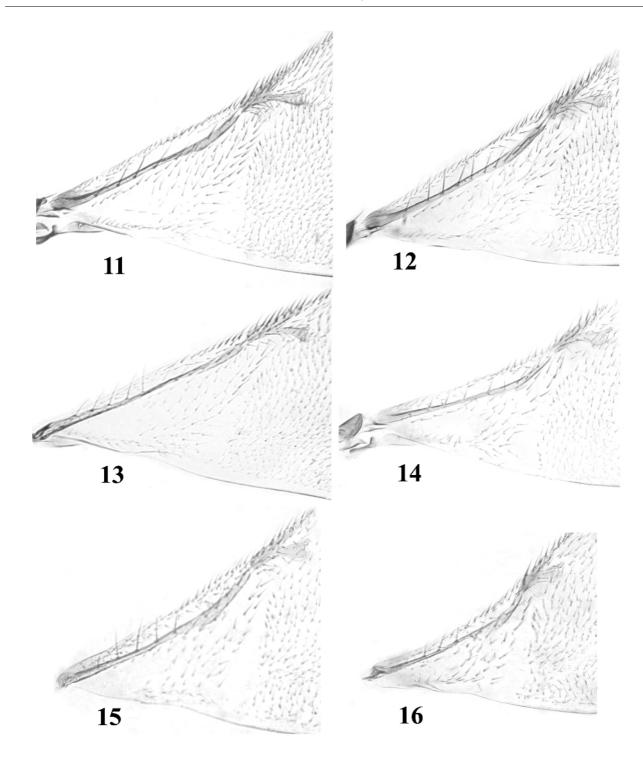
Host: Unknown.

Material examined: CHINA, $1 \stackrel{?}{\rightarrow}$, Gansu: Wenxian, 21. vii. 1999, 2 350 m, ZHU Chao-Dong; 2 $\stackrel{?}{\rightarrow}$, Yunnan: Diqing, 5. viii. 1984, 1 260 m, LI Chang-Fang; $11 \stackrel{?}{\rightarrow}$, Yunnan: Xishuangbanna, 13. xi. 2002, ZHEN Wen-Quan; $5 \stackrel{?}{\rightarrow}$, Yunnan: Xishuangbanna, 25. xi. 2002, ZHEN Wen-Quan.

Comments: Parablatticida citri is very close to Parablatticida terebrata (Trjapitzin), but can be separated by characters as shown in the key below.



Figs. 1-10 Antenna and ovipositor/genitalia of Parablatticida spp. 1-6: antenna, $\begin{subarray}{l} \cdot 1:P. brevicornis ; 2:P. orientalis sp. nov.; 3:P. scapta sp. nov.; 4:P. terebreta; 5:P. citri; 6:P. magniclava. <math>7-8$: ovipositor, $\begin{subarray}{l} \cdot :P: brevicornis ; 8:P. terebreta. 9: antenna, P. brevicornis, <math>\begin{subarray}{l} \cdot :P: brevicornis ; 0:P: b$



Figs. 11 – 16 Fore wing of Parablatticida spp. 11: P. brevicornis , $\stackrel{\circ}{+}$; 12: P. orientalis sp. nov. , $\stackrel{\circ}{+}$; 13: P. scapta sp. nov. , $\stackrel{\circ}{+}$; 14: P. terebreta , $\stackrel{\circ}{+}$; 15: P. citri , $\stackrel{\circ}{+}$; 16: P. magniclava , $\stackrel{\circ}{+}$.

3. *Parablatticida orientalis* **sp. nov.** (Figs. 2 , 12) **Female**: Body length 1.2 – 1.4 mm.

Coloration: Body dark brown, head and gaster with green sheen, thorax with blue green sheen; antennae dark brown, with scape longitudinally yellow or yellow brown; fore wing hyaline but slightly infuscate under marginal vein; legs with coxae dark brown, and

rest generally dark brown to pale brown except base of mid tibia and basal tarsal segments yellow.

Head: Head nearly 3.5 times as wide as frontovertex; sculpture of frontovertex reticulate; ocelli forming an angle slightly more than 60°; posterior ocelli about half their own diameters from inner eye margin, and about their own diameters from occipital margin;

interantennal prominence slightly convex; antennal scrobes more or less deep; antennal toruli a little more than their own length from mouth margin; antenna (Fig. 2) with scape distinctly expanded and flattened, 2.5-3 times as long as broad; pedicel twice as long as broad; funicle with all funicular segments transverse, F1 - F2 clearly smaller than F3 - F6; clava three segmented, with apex obliquely truncated; malar space about half eye length.

Thorax: Mesoscutum and scutellum with striated reticulate sculpture; fore wing (Fig. 10) about 2.4 times as long as broad; marginal vein about twice as long as broad; stigmal vein, post marginal vein about as long as marginal vein.

Gaster: Gaster about as long as thorax; ovipositor slightly exserted.

Male: Unknown. **Host**: Unknown.

CHINA , Holotype: Xishuangbanna , 25 . xi . 2002 , ZHEN Wen-Quan .

Paratypes: $4 \stackrel{\triangle}{+} \stackrel{\triangle}{+}$, same data as holotype; CHINA, $1 \stackrel{\circ}{+}$, Yunnan: Xishuangbanna, 30. iii. 2003, ZHEN Wen-Quan; $2 \stackrel{\circ}{+} \stackrel{\circ}{+}$, Yunnan: Xishuangbanna , 17 . v . 2003 , ZHEN Wen-Quan ; 3 ♀ ↑, Yunnan: Xishuangbanna, 13. xi. 2002, ZHEN Wen-Quan; $1 \stackrel{\circ}{+}$, Sichuan: Chengdu, 13. viii. 2003, ZHANG Yan-Zhou.

Comments: Parablatticida orientalis is close to P. brevicornis, but can be separated from the latter by F1 – F2 small, F3 – F6 conspicuously larger than F1 and F2 (in brevicornis, F1 - F3 small, F4 - F6 conspicuously larger than F1 – F3).

4. Parablatticida scapata sp. nov. (Figs. 3, 13) **Female**: Body length 1.2 - 1.4 mm.

Coloration: Head completely dark brown, with purplish sheen; thorax dorsally dark brown, ventrally yellowish brown; gaster brown but ventrally yellow; antennal scape black, extreme base and apex yellowish; rest part of antenna dark brown or dark yellow brown, except apical funicular segments and clava ventrally yellow; fore wing hyaline; legs generally yellow brown except mid coxae more darker, the apices of fore and mid tibia, outer side of hind femora more paler.

Head: Head about 3 times as wide as frontovertex; sculpture of frontovertex punctate; ocelli forming an angle about 60°; posterior ocelli about half their own diameters from inner eye margin, and about their own diameters from occipital margin; interantennal prominence convex; antennal scrobes more or less deep; antennal toruli about their own length from mouth margin; antennae (Fig. 3) with scape strongly expanded and flattened , 1.6 - 1.8 times as long as broad; pedicel twice as long as broad; funicle with all

funicular segments transverse, sometimes F5, F6 quadrate, F1 - F4 smaller than F5 - F6; clava three segmented, with apex obliquely truncated; malar space about 2/3 eye length.

Thorax: Sculpture of mesoscutum striatedreticulate; scutellum with punctate sculpture, and posteriorly with dense white hairs; fore wing (Fig. 13) about 2. 4 times as long as broad; marginal vein marginal vein about twice as long as broad and about as long as stigmal vein; post marginal vein nearly as long as marginal vein.

Gaster: Gaster about as long as thorax; ovipositor slightly exserted.

Male: Unknown. **Host**: Unknown.

Holotype: CHINA, $\stackrel{\circ}{+}$, Yunnan: Xishuangbanna, 25. xi. 2002, ZHEN Wen-Quan.

Paratypes : $2 \stackrel{\triangle}{+} \stackrel{\triangle}{+}$, same data as holotype.

Comments: Parablatticida scapta separated from the known species of *Parablatticida* by its strongly expanded and flattened scape which is 1.6-1.8 times as long as broad, by its coloration of body and antenna, and by the dense white hairs on scutellum.

5. Parablatticida terebrata (Trjapitzin) (Figs. 4, 8, 14) New Record for China

Amaurilyma terebrata Trjapitzin , 1965 : 899. Holotype ♀ , Russia: Primor 'ye Kray (ZISP).

Parablatticida terebrata: Trjapitzin, 1989: 384.

Diagnosis. **Female**: Body length 0.7 – 1.1 mm. coloration similar to P. brevicornis; head about 3.3 times as wide as frontovertex; ocelli forming an angle less than 60°; antenna (Fig. 4) with scape somewhat expanded and flattened, about 2.3 times as long as broad; funicle with F1 - F4 distinctly smaller than F5 - F6; clava 3-segmented, apically obliquely truncate. Mesoscutum and scutellum with striated reticulate sculpture; fore wing about 2.4 times as long as broad, venation as in Fig. 14; ovipositor (Fig. 8) about 0.55 times mid tibia length; ovipositor sheath nearly half ovipositor length, clearly exserted.

Male: Unknown.

Distribution: China, Russia.

Host: Unknown.

Material examined: CHINA, $2 \stackrel{\triangle}{+} \stackrel{\triangle}{+}$, Jilin: Changbai Mt., 26. vii. 1990, HUANG Da-Wei.

Comments: See comments above.

6. Parablatticida magniclava Hayat (Figs. 6, 16) **New Record for China**

Parablatticida magniclava Hayat , 2003: 227 - 228. Holotype ♀ , India (ZADMU).

Diagnosis. Female: Body length 0.7 – 1.2 mm. coloration similar to P. brevicornis; head about 3.3 times as wide as frontovertex; ocelli forming an angle less than 60° ; antenna (Fig. 6) with scape somewhat expanded and flattened, about 2.3 times as long as broad; funicle with F1 – F5 distinctly smaller than F6; clava 3-segmented, apically slightly obliquely truncate; fore wing wide, about 2.3 times as long as broad, venation as in Fig. 16; ovipositor hardly exserted.

Male: Unknown.

Distribution: China, India.

Host: Unknown.

Material examined: CHINA, $1 \stackrel{\circ}{+}$, Guangxi:

Jinxiu , ALT. 1 100 m , 11 . v . 1999 , ZHANG Yan-Zhou ; 1 $\stackrel{\circ}{+}$, Hainan : Wuzhi Mt. , 24 . iv . 1964 , CHEN Tai-Lu ; 1 $\stackrel{\circ}{+}$, Sichuan : Wulong , 4 . vii . 1989 , ALT . 750 m , HUANG Da-Wei .

Comments: Hayat (2003) stated *Parablatticida magniclava* is similar to P. citri. It is in our view that P. magniclava may be more closely related to P. trinidadensis Noyes and Hayat (1984), and a further study is needed about their relationships.

Key to species of Parablatticida (females) from China

1	Thorax yellow brown ventrally; apical funicular segments and clava partly yellowish; antennal scape clearly expanded and flattened, 1.6 – 1.8 times as long as broad (Fig. 3)
	Thorax completely dark brown; funicle and clava completely dark brown; antennal scape if expanded and flattened, at least 2 times as long as
	broad
2	F1 - F2, or F1 - F3 small, conspicuously smaller than following funicle segments; antennal scape clearly expanded and flattened (Figs. 1,
	2)
	Funicle segments otherwise; antennal scape, if expanded, not strongly as above
3	F1 – F2 small , F3 – F6 conspicuously larger than F1 and F2 (Fig. 2)
	F1 – F3 small , F3 – F6 conspicuously larger than F1 – F3 (Fig. 1)
4	F1 – F5 small , F6 conspicuously larger than F1 – F5 (Fig. 6)
	F1 - F4 small , $F5 - F6$ conspicuously larger than $F1 - F4$
5	Ovipositor exserted, the exserted part about 1/4 gaster length; ovipositor sheath nearly half ovipositor length (Fig. 8); antennal scape about
	2.2 times as long as broad (Fig. 4); apex of antennal clava obliquely truncated

Ovipositor if exserted, the exserted part less than 1/4 gaster length; ovipositor sheath 0.4 times ovipositor length; antennal scape subcyindrical, about 3 times as long as broad (Fig. 5); apex of antennal clava obliquely truncated but not strongly as above ... P. citri

References

- Curtis J , 1829. A Guide to an Arrangement of British Insects. London. 256
- Dahms EC, Gordh G, 1997. A review of the genera of Australian Encyrtidae (Hymenoptera: Chalcidoidea) described from Australia by A.A. Girault with a checklist of included species. *Memoirs on Entomology*, *International*, 9:518.
- Dalman JW, 1820. Försök till Uppstöllning af Insect-familjen Pteromalini, i synnerhet med afseende påde i Sverige funne Arter. *Kungliga Svenska Vetenskapsakademiens Handlingar*, 4I(1):123–174, 177–182.
- Ferrière C , 1953. Encyrtids paléarctique (Hymenoptera: Chalcidoidea) nouvelle table des genera avec notes et synonomies. Mitteilungen der Schweizerischen Entomologischen Gesellschaft , 26(1):1-45.
- Girault AA, 1915. Australian Hymenoptera Chalcidoidea

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 The family Encyrtidae with descriptions of new genera and species. Memoirs of the Queensland Museum, 4:1–184.
- Graham MWR de V , 1958. Notes on some genera and species of Encyrtidae (Hym., Chalcidoidea), with special reference to Dalman's types. Entomologisk Tidskrift , 79(3/4):147 – 175.
- Hayat M, 2003. Records and descriptions of Indian Encyrtidae (Hymenoptera: Chalcidoidea). Oriental Insects, 37:226.
- Hellen W , 1949. Zur Kenntnis der Encyrtiden Finnlands. Notulae Entomologicae , 29 : 41 – 50.
- Masi L , 1917. Chalcididae of the Seychelles islands. Novitates Zoologicae , 24:121-330.
- Mercet RG, 1921. Fauna Iberica. Himenopteros Fam. Encyrtidos. Museo Nacional de Ciencas Naturales, Madrid. 727 pp.
- Noyes JS, 1980. A review of the genera of Neotropical Encyrtidae (Hymenoptera: Chalcidoidea). Bulletin of the British Museum (Natural History) (Entomology), 41:107-253.
- Noyes JS, 1981. On the types of the species of Encyrtidae described by R.

- Garcia Mercet (Hymenoptera: Chalcidoidea). Eos. Revista Espanla di Entomologia. Madrid, 55/56:165 189.
- Noyes JS , 2006. Universal Chalcidoidea Database. http://internt.nhm.ac.uk/jdsml/perth/chalcidoids/[accessed Jul. 1 , 2006].
- Noyes JS, Hayat M, 1984. A review of the genera of Indo-Pacific Encyrtidae (Hymenoptera: Chalcidoidea). Bulletin of the British Museum (Natural History) (Entomology), 48:131-395.
- Thompson WR, 1954. A Catalogue of the Parasites and Predators of Insect Pests. Section 2. Host Parasite Catalogue. Part 3. Hosts of the Hymenoptera (Calliceratid to Evaniid). Commonwealth Agricultural Bureaux, Commonwealth Institute of Biological Control, Ottawa. 191 332
- Thomson CG, 1876. Skandinaviens Hymenoptera. 4. Lund. 192 pp.
- Trjapitzin VA, 1965. New encyrtid species (Hymenoptera: Encyrtidae) from the Maritime Territory. Entomologicheskoe Obozrenie, 44 (4): 885 – 906.
- Trjapitzin VA , 1978. Hymenoptera [] . Chalcidoidea 7. Encyrtidae. Opredeliteli Nasekomykh Evropeyskoy Chasti SSR , 3:236 328.
- Trjapitzin VA, 1989. Parasitic Hymenoptera of the Fam. Encyrtidae of Palaearctics. Opredeliteli po Faune SSSR, 158:1-489. Zoologicheskim Institutom Akademii Nauk SSR, Leningrad.
- Walker F , 1838. Monographia Chalciditum. Entomological Magazine , 5:102 118.
- Xu ZH, 2003. Six new record genera and species of Encyrtidae from China (Hymenoptera: Chalcidoidea). Forest Pest and Disease, 22(1):18-19.[徐志宏 2003. 中国跳小蜂科六种新记录属六种新记录种(膜翅目: 小蜂总科). 中国森林病虫 22(1):18-19]
- Zhang YZ, Huang DW, 2004. A Review and an Illustrated Key to Genera of Encyrtidae (Hymenoptera: Chalcidoidea) from China. Beijing: Science Press. 166 pp.

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中国副蟑跳小蜂属分类研究及两新种记述 (膜翅目:跳小蜂科)

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摘要:记述了分布于中国的副蟑跳小蜂属 Parablatticida 的 6 种 其中有 2 新种: P. orientalis sp. nov.和 P. scapata sp. nov.; P. brevicornis (Dalman), P. magniclava Hayat 和 P. terebrata (Trjapitzin) 为中国新记录种。文中提供了分 种检索表、形态特征图。模式标本及其他研究标本保存在中国科学院动物研究所动物标本馆。

关键词:膜翅目;跳小蜂科;副蟑跳小蜂属;新种;中国

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